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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,242	10/09/2001	Chia-Hsun Chen	MS180588.1	5346

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AMIN & TUROCY, LLP
24TH FLOOR, NATIONAL CITY CENTER
1900 EAST NINTH STREET
CLEVELAND, OH 44114

EXAMINER

SHAH, SANJIV

ART UNIT	PAPER NUMBER
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2176

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/973,242

Applicant(s)

CHEN ET AL.

Examiner

Sanjiv D. Shah

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-31 rejected under 35 U.S.C. 103(a) as being unpatentable over Multer et al. (Patent # 6,694,336) in view of Baisley (Patent # 6,502,112).

Regarding claims 1, 14, 20, 22, 24, 25, 26, 30 -33, Multer et al. teaches the claimed invention of differentiating two data sources (See fig 1)

A component that determines differences between the data sources (See abstract, lines 6-7, wherein Multer et al. teaches a difference engine that determines the differences between two data sources)

A formatter that described the differences (See abstract, lines 7-9, wherein Multer teaches application interface interpreting application data for the difference engine, that is equivalent to the formatter).

Data field representing previous state and current state to determine difference is described in the abstract lines 4-10.

Multer et al. teaches determining whether to replace the change field as described in col. 2, lines 6-12.

Though Multer et al. teaches the difference engine to determine difference between two files, it fails to specifically teach determining difference between two XML sources (files) as well as outputting the difference together with a representation of at least one of the xml data source as claimed. Baisley does.

Specifically Baisley teaches differentiating two XML documents from two different source as shown in fig 2. Baisley also teaches outputting difference with representation of xml data source as described in col. 3, lines 10-13, wherein Baisley teaches comparing a semantic graph encoded in the document to obtain difference component.

It is obvious that Baisley output difference with a representation of data source, i.e. unique id as shown in fig 2.

Therefore it would have been obvious for a person with ordinary skill in the art at the time the invention was made to incorporate the XML source difference computing system in the system of Multer et al. because it provides faster data synchronization by synchronizing only changed data.

Regarding claim 2, Multer et al. teaches the claimed invention of Diff engine (as described in the abstract lines 6-7) based on input options (Col. 11, lines 14-18).

Regarding claims 3, 15, Multer et al. teaches a filter module as described in col. 12, lines 55-57 and lines 65-col. 13, lines 5. The filtering module determines what to filter in comparison and how synchronization is done, which is equivalent to claimed one of none, ignore empty element....etc. because it is interpreted as filtering rules.

Regarding claims 4, 16, 17, Multer et al. teaches the claimed invention of difference engine adapted to receive plurality of methods and associated parameters relating to data source and return one or more difference results. (See col. 8, lines 1-5, wherein plural methods of synchronizing contact information, calendar information and binary file information is described. The difference engine will return one or more difference results)

Regarding claim 5, Multer et al. teaches the difference results including at least one of file fields is described in col. 5, lines 55-67.

Regarding claim 6, Multer teaches a differencing engine calculating differences in data and presenting a change log as described in col. 11, lines 65-col. 12, lines 12. Each transaction is compared and a change or difference is presented. Therefore it is obvious that the difference results comprise one element value not matched.

Regarding claim 7, Multer teaches a difference result forwarded to storage server as described in col. 12, lines 15-22 that is equivalent to claimed container.

Regarding claims 8, 27, 28, 29, Multer does not teach a nested diffgram including difference information as claimed. Baisley does. Specifically Baisley teaches the symantic graph generation as described in col. 3, lines 29, col. 4, lines 49 and col. 6, lines 22-42.

Therefore it would have been obvious for a person with ordinary skill in the art at the time the invention was made to incorporate Baisley's graph, which is equivalent to instant diffgram in the system of Multer et al. because it provides easy comparison between various objects, which is always desired.

Regarding claims 9, 10, 18, 19, 23, Multer teaches the claimed invention of container including one or more states representing comparison between files as described in col.

11, lines 58-65, wherein the difference engine compares data from previous state and present state.

Regarding claim 11, Multer teaches a data packages. It is well known that data packages has beginning and ending tags.

Regarding claim 12, 13, Multer et al. teaches the Id field and data field as described in col. 12, lines 42-45.

Regarding claim 21, Multer teaches a local network system as shown in fig 1-5.

Response to Arguments

1. Applicant's arguments filed 2/28/2005 have been fully considered but they are not persuasive.

Applicant argues that the cited prior art fails to teach difference component together with representation of XML source. Examiner disagrees. Baisley teaches comparing a semantic graph encoded in the document to obtain difference component. It is obvious that Baisley output difference with a representation of data source, i.e. unique id as shown in fig 2. Baisley also teaches outputting difference with representation of xml data source as described in col. 3, lines 10-13, wherein Baisley teaches comparing a semantic graph encoded in the document to obtain difference component. Therefore applicant's arguments are not persuasive.

Applicant also argues that the cited prior art fails to teach determining corrective actions based on difference. Examiner disagrees. Specifically, Multer et al. teaches determining whether to replace the change field as described in col. 2, lines 6-12. Therefore applicant's arguments are not persuasive.

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanjiv D. Shah whose telephone number is (571) 272-4098. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sanjiv D. Shah
Primary Examiner
Art Unit 2176

S. Shah
May 14, 2005